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United States Patent [19]

Yukitake et al.

[11] **Patent Number:** 5,745,182[45] **Date of Patent:** Apr. 28, 1998[54] **METHOD FOR DETERMINING MOTION COMPENSATION**[75] **Inventors:** Takeshi Yukitake; Shuji Inoue, both of Yokohama, Japan[73] **Assignee:** Matsushita Electric Industrial Co., Ltd., Osaka, Japan[21] **Appl. No.:** 278,010[22] **Filed:** Jul. 20, 1994**Related U.S. Application Data**

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[30] **Foreign Application Priority Data**

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[51] **Int. Cl.⁶** H04N 7/32[52] **U.S. Cl.** 348/416; 348/699[58] **Field of Search** 348/413, 416, 348/699, 400-402, 407, 409-412, 384, 390, 415; 382/232, 236, 238; H04N 7/137[56] **References Cited****U.S. PATENT DOCUMENTS**

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Primary Examiner—Richard Lee**Attorney, Agent, or Firm**—Watson Cole Stevens Davis, P.L.L.C.

[57]

ABSTRACT

A method for predicting motion compensation for determining of an input image based on a motion vector of the input image from this input image to a reference image which has been sampled at a first set time, and the method includes calculating a motion vector of the input image based on a move, at a second set time, of a block unit which is a part of the input image and consists of a plurality of pixels, and calculating a motion vector of the reference image based on a move, at the first set time, of a block unit which is a part of the reference image and consists of a plurality of pixels. Move compensation of the input image is calculated both from the motion vector of the input image and from the motion vector of the reference image, to thereby realize a method for determining motion compensation with high precision.

3 Claims, 6 Drawing Sheets